BY ORDER OF THE COMMANDER, PACIFIC AIR FORCES PACAF INSTRUCTION 21-102 5 April 1995

Maintenance

MONTHLY MAINTENANCE SUMMARY REPORTING PROCEDURES (RCS: PAF-LGM(M) 7211)



#### COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes requirements and provides procedures for preparation and publication of RCS: PAF-LGM(M)7211, Monthly Maintenance Summary. It implements AFPD 21-1, Managing Aerospace Equipment Maintenance. The summary provides local management, numbered air forces commanders, and Headquarters Pacific Air Forces with information which describes the availability, reliability and maintainability of Aerospace Weapons Systems. Information contained in this report is used for evaluating the effectiveness and efficiency of PACAF aircraft maintenance. This instruction does not apply to the Air National Guard or US Air Force Reserve units and members.

### **SUMMARY OF REVISIONS**

Defines HQ PACAF Monthly Maintenance Summary reporting procedures, Electronic Mail guidance, combat air forces (CAF) and PACAF standards review, and attrition factor.

### Section A—General Instructions

- **1. Introduction.** This instruction defines logistics performance terms, reporting procedures, and standard review processes. The focus is accurate measurement and reporting. The result of compliance with this instruction should be the quick and accurate identification of potential problems or areas of improvement in PACAF aircraft and equipment maintenance.
- **2. Scope.** This instruction applies to all PACAF organizations possessing aircraft. It also applies to all PACAF units deploying aircraft.
- **3. Responsibility.** Wing, Flying Squadron, Operations Group, and Logistics Group commanders are responsible for compliance with this instruction and accuracy of the data. The Wing Analysis is responsible for assembling, editing, publishing, and distributing the 7211 report. The flying squadron analyst will be responsible for providing the monthly data to Wing Analysis.

- **4. Accuracy of Data.** The information reported in the 7211 report is used by maintenance management personnel to support decisions which directly affect the posture of PACAF aircraft and maintenance support organizations. Therefore, it is crucial that all information be accurate.
- **5. Sources of Data.** CAMS will be the source of the data contained in the 7211 report unless otherwise stated in this document.
- **6.** Changes to Instructions. Changes, deletions or additions to this instruction are not authorized without prior approval of HQ PACAF/LGMM. Submit recommended changes and/or waivers to this instruction to HQ PACAF/LGM, 25 E St., Suite I319, Hickam AFB, HI 96853-5427.
- **7. Algorithms.** Formulas used in computing maintenance indicator rates and performance measures are listed in attachment 1.
- **8. Electronic Media.** Copies of this instruction are available in disk. If you would like to have a copy, contact HQ PACAF/LGMMM, DSN 449-8877.

# Section B—Aircraft Reporting Requirements

- **9. Purpose.** This chapter describes the overall report concept. It provides sample format for the RCS: PAF-LGM(M)7211, Monthly Maintenance Summary.
- **10.** Coordination. Commanders will establish coordination requirements to ensure timely reporting and data accuracy. Coordination must include an OPR from base supply responsible for MICAP support. The OPR should be identified by the local base supply commander.
- **11. Late Reports.** Wing Analysis will notify HQ PACAF/LGMMM as soon as they determine that their 7211 report will be late, and provide explanations of the cause and the estimated time the report will be forwarded.
- **12. Correction Procedures.** Erroneous data must be corrected upon discovery. Notify HQ PACAF/ LGMMM immediately via telephone of all errors discovered so that necessary action is taken to correct faulty data. Submit all corrections by means of E-mail , fax, or message.
- **13. Quality Remarks.** Quality and in-depth remarks are very important. They are used to build our script to brief the PACAF/CC. The Wing Analysis is responsible for making sure that the remarks provided are factual, complete, and accurate.
  - 13.1. All maintenance indicators measured out-of-standard require comments. The narrative is not complete unless it covers the Who, What, When, Where, Why, and How of the indicator. Statements such as "out of standards for WUC XXXXX" are not acceptable, as it does not explain why the WUC is driving unit performance.
  - 13.2. For TNMCS problems and high cannibalization items provide the full National Stock Number (NSN) and noun so HQ PACAF works the right issue. Base supply will provide the information required as stated under items 13.2.1 and 13.2.2 to Wing Analysis not later than the 4th calendar day of each month.

- 13.2.1. Top 5 NMCS items. Provide stock number, nomenclature, work unit code, (first two digits), and ranked by hours, (refer to Section II, item "c"). Use WSMIS RAM to identify the top 5 NMCS (MICAP) items.
- 13.2.2. Top 5 cannibalization items. Provide stock number, nomenclature, WUC (5 digits), and ranked by the number of incidents. Use WSMIS RAM to determine the top 5 cannibalization items (refer to Section II, item "i").
- 13.3. All supply chargeable deviations will be explained in detail such as late fuel truck, late parts delivery, etc. In addition, the date and aircraft tail number are required in the comments (refer to Section II, item "d" format 2).
- **14. 7211 Report Historical Data.** A master file of monthly 7211 reports and other logistics indicators pertinent to the maintenance and flying operations will be maintained by the Maintenance Analysis Section. As a minimum, two years of historical data must be kept.

### 15. Monthly Maintenance Summary, RCS: PAF-LGM(M)7211.

- 15.1. Purpose. This report is used by intermediate command and MAJCOM functional managers. It is used as the official document for briefings to the PACAF/CC and other senior leaders (i.e. AFLC/CC, F-15 SPO). It consists of two sections; Section I contains logistics data while Section II will be used to provide narrative explanations when key indicators do not meet established Combat Air Forces standards or PACAF standards. Comments must be specific and address the reason(s) why standards were not achieved.
- 15.2. Applicability. The report will be submitted on all aircraft by MDS except aircraft that are maintained under contract which includes C-12C/F, C-21A, and UH-1N. Units possessing more than one MDS will report each separately.
  - 15.2.1. For units possessing a mix of F-16 aircraft, F-16A/B/C/D series are considered one MDS for 7211 reporting purposes.
  - 15.2.2. The F-15E aircraft will be reported separately on the 7211. All other F-15 models will be combined and reported as F-15.
  - 15.2.3. For organizations possessing both A-10A and OA-10A aircraft will combine the data and report the fleet as OA-10.
  - 15.2.4. E-3 units possessing E-3 aircraft at home station and deployed will report their data in three separate totals; one for home station, another for deployed aircraft data and a combined total for both.
- 15.3. Method and Frequency of Reporting. PAF-LGM(M)7211 will be transmitted monthly via E-Mail NLT 2200Z time on the 8th calendar day following the month being reported. If E-Mail is not available, then the report will be sent via priority message or fax. Report will be addressed to HQ PACAF/LGM and the appropriate numbered Air Force LG.

15.4. Contents of Report. The contents of the 7211 report must include all the data elements and in the same order as depicted in the sample format provided in attachment 1. Finally, provide the information by flying squadron and fleet total is also required.

RICHARD M. MAY, JR., Colonel, USAF Director of Logistics

# GLOSSARY OF ABBREVIATIONS AND ACRONYMS

# Abbreviations and Acronyms

**AA**—Air Abort

**ACFT**—Aircraft

AVG.—Average

**AWM**—Awaiting Maintenance

**AWP**—Awaiting Parts

**CAF**—Combat Air Forces

**CAMS.**—Core Automated Maintenance System

CANN RATE.—Cannibalization Rate

CHRG.—Chargeable

**CUM.**—Cumulative

**CUM PROG**—Cumulative Programmed

C/C—Crew Chief

**DCC**—Dedicated Crew Chief

**DEV**—Deviation

E-MAIL.—Electronic Mail

**ETIC**—Estimated Time In Commission

FAX.—Facsimile

FLT—Flight

FS.—Flying Squadron

**FSE.**—Flying Scheduling Effectiveness

**GA.**—Ground Abort

**HHQ**—Higher Headquarters

**HRS**—Hours

**FMC.**—Full Mission Capable

**IFE.**—In Flight Emergency

LAN—Local Area Network

MAJCOM—Major Command

MC—Mission Capable

MDS.—Mission Design Series

MICAP—Mission Capability

MSADBM—Maintenance Systems Analysis Database Manager

**NMC**—Not Mission Capable

**NMCB**—Not Mission Capable Both

**NMCM**—Not Mission Capable Maintenance

**NMCS**—Not Mission Capable Supply

**NSN**—National Stock Number

O&M—Operational & Maintenance

**OPR**—Office of Primary Responsibility

**OT**—Other

**PAA**—Primary Authorized Aircraft

PMC—Partial Mission Capable

PMCB—Partial Mission Capable Both

PMCS—Partial Mission Capable Supply

PMCM—Partial Mission Capable Maintenance

**POC.**—Point of Contact

PRD—Pilot Reported Discrepancies

**PROG UTE.**—Programmed Utilization

**SORT**—Sorties

**SCHED**—Scheduled

**SQDN**—Squadron

**TNMCM**—Total Not Mission Capable Maintenance

**TNMCS**—Total Not Mission Capable Supply

**TPMCM**—Total Partially Mission Capable Maintenance

**TPMCS**—Total Partially Mission Capable Supply

**UTE**—Utilization

WSMIS—Weapon System Management Information System

WUC—Work Unit Code

# **SAMPLE 7211 REPORT FORMAT**

BASE: XXXX

MONTH: XXXX

SUBJ: RCS: PAF-LGM(M)7211, Monthly Maintenance Summary

SECTION I: WING FLYING AND STATUS DATA.

- 1. Possessed Hours
- 2. AVG Possessed ACFT
- 3. MC Hours
- 4. MC Rate
- 5. TNMCM Hours
- 6. TNMCM Rate
- 7. TNMCS Hours
- 8. TNMCS Rate
- 9. Sorties Scheduled
- 10. Sorties Flown
- 11. Ute Rate
- 12. Hours Flown
- 13. Sorties Attempted
- 14. Adjusted Scheduled
- 15. Chargeable Deviations
- 16. Flying Scheduling Effectiveness Rate
- 17. Air Aborts
- 18. Ground Aborts
- 19. Total Abort Rate
- 20. Breaks
- 21. Break Rate
- 22. Fixes
- 23. Fix Rate
- 24. Canns
- 25. Cann Rate
- 26. Hangar Queens

- SECTION II: COMMENTS. Provide clear explanations for any indicator which fails to meet established standards, or for which an unfavorable trend is developing. To help you prepare your comments, listed below are samples for each indicator. It should be noted that the format varies for different types of indicators. It is imperative that comments for "like items" for different MDS be grouped and reported on the same page. For example, if the F-15C/D, KC-135, and E-3 failed to meet the TNMM standards the comments for the F-15C/D should appear first, then the KC-135 immediately below it, and the E-3 comments directly below the KC-135. Please follow this format when reporting all other "like items" (i.e., TNMCS, FSE, GA, AA, breaks, fix, and canns) involving different MDS. Extra care should be exercised to ensure that the required format is followed. Again, comments should indicate the actual cause of potential problems and what type of management action is being taken to correct those areas. Further, comments should be used to reflect concerns of senior leaders and management. Lastly, POCs from Wing Analysis and Supply must be indicated at the end of the 7211 report.
- a. MC RATE: The MC rate of 82.% failed to meet the standard by 3%. Although engines and phase inspection are our leading NMC drivers, their contribution is within normal ranges. The primary cause of being out of standard was four canopy changes caused by the tornado we experienced. These actions drove 950.0 hours of NMCS and 1300.0 hours of NMCM.
- b. TNMCM RATE: The TNMCM rate continues to suffer for the third consecutive month, however, there were no trends identified. (For F-16, F-15, and 0A-10 aircraft, provide a breakdown of TNMCM hours by 2 digit WUC using format "1" below. The sum of all 2 digit WUC should equal total TNMCM hours reported. WUC should be sorted numerically. This information is required whether TNMCM meets standards or not. When standards are not met, an explanation of factors and further breakdown (5 digit WUC) of top 5 items is required. For all other MDS, follow format "2").
- 1. 2 DIGIT WUC NOMENCLATURE NMCM HRS NMCB HRS TOTAL
- 2. 5 DIGIT WUC NOMENCLATURE NMCM HRS NMCB HRS TOTAL
- c. TNMCS RATE: Although the 5.2% for the month failed to meet the standard by 1.8%, we have seen improvement in two of our top concerns--all MICAP canopies were delivered and we have gotten good status on MAU-12 ejector racks. (Note: Base Supply is the source for the top 5 MICAP items).

### WUC NOMENCLATURE MICAP (WISMIS) HRS NSN

d. FLYING SCHEDULING EFFECTIVENESS RATE: This indicator continues to deteriorate, dropping below standard for the third consecutive month. There were 55 chargeable deviations, of which 34 were for ground aborts and the major dominating systems were engine and auxiliary power with 9 each, landing gear and flight controls with 4 each. There were 15 maintenance deletes with (no trends noted) 1 maintenance late, 4 supply lates, and 1 ops add. We are taking the following actions to correct these problems. Our plans for aborts (detailed under aborts below) should cut both aborts and maintenance deletes on the second go, while our spare availability will be up to normal now that we have repaired damaged canopies, which will also reduce maintenance deletes. (Report all chargeable deviations using format "1" except supply deviations which should be reported using format "2." This information is required whether or not the standards are met. Remember, quality narratives must be provided when the rate is out of standard).

#### CHARGEABLE DEVIATIONS

1. <u>TYPE DEV</u>	LATE/EARLY	<u>CANCEL</u>	<u>DELETEADD</u>
MAINT OPS	XXX XXX/XXX	XXX XXX	XXX XXXXXX
	A CITT		
2. DATE	<u>ACFT</u>	<u>WUC</u>	<u>DEVREASON</u>

e. AIR ABORTS. Report all air aborts whether or not the abort rate is within standard. (Air abort summary should be reported by squadron using the following format).

<u>SODN ACFT DATE WUC DISCREPANCY CORRECTIVE ACTION</u>

- f. GROUND ABORTS. The total abort rate failed to meet the standard for the second time in a row due to excessive amount of ground aborts. There were 31 ground aborts and the major contributing factors were as follows: 8 engines, 6 fuel systems, 5 flight instruments, 4 landing gear, and 4 power supply. For engines, we have developed an expanded engine debrief checklist which should allow us to catch these problems sooner. For fuel systems and flight instruments, we have instituted power on pre-flights for all aircraft down more than three days which should catch the bulk of these problems. (Report a summary of top 5 items using format "1", and then use format "2" to report a detailed listing of these top 5 items. This information is required whether the standard was met or not. Finally, report the data by squadron).
- 1. Summary of top 5 ground aborts:

WUC NOMENCLATURE NUMBER OF GROUND ABORTS

2. Detailed listing of top 5 ground aborts:

SQDN ACFT DATE WUC DISCREPANCY CORRECTIVE ACTION

- g. CODE 3 BREAKS BY SYSTEM: Provide a summary of the top 5 systems using format "1", and use format "2" to report a detailed listing of these items.
- 1. Summary of top 5 code 3 breaks:

#### WUC NOMENCLATURE NUMBER OF CODE 3 BREAKS

2. Detailed listing of top 5 items pacing the break rate:

### SODN ACFT WUC DISCREPANCY CORRECTIVE ACTION

- h. 8-HR/12-HR FIX RATE: For the first time in six months, the 8-hr/12-hr fix rate fell below standard, achieving 78.9% for the month. None of the long fixes were for items which normally could be repaired in 8 hours. (Provide the top 3 systems pacing the fix rate using format "1", and follow format "2" to report all items not fixed within 8-hr/12-hr).
- 1. Summary of top 3 systems not fixed within 8-hr/12-hr

### WUC NOMENCLATURE

2. Detailed listing of top 3 items not fixed within 8-hr/12-hr

# ACFT WUC HRS DISCREPANCY CORRECTIVE ACTION

i. CANN RATE: There were 35 cann items performed for a rate of 9.5%, which is our highest this fiscal year. Most of these canns were a planned part of our recovery of the aircraft MICAP for canopies, and do not reflect any new problem. (Top 5 cann actions must be listed in the format provided. Base supply is the OPR for this report).

### <u>WUC NOMENCLATURE NSN #CANNS</u>

j. HANGAR QUEEN AIRCRAFT: We had one hangar queen aircraft during the month, again due to canopy problems. (Provide any detailed information regarding delays in rebuild such as Local/HHQ exercise or cann aircraft, etc.)

(Report hangar queen aircraft in accordance with the format shown below. Definition of a hangar queen aircraft is shown on page 9).

DATE NEXT

<u>ACFT DISCREPANCY LAST FLOWN SCHED FLT</u>

# **ALGORITHMS AND DEFINITIONS**

- **A3.1. Purpose.** This attachment defines the terms and formulas used in computing maintenance indicators data reported in the 7211 summary.
  - A3.1.1. MISSION CAPABLE (MC) RATE: The percent of possessed hours that an aircraft is partially or fully mission capable.

FMC HOURS + PMCB HOURS + PMCM HOURS + PMCS HOURS
X 100
POSSESSED HOURS
A3.1.2. TOTAL NOT MISSION CAPABLE MAINTENANCE (TNMCM) RATE: The percent of possessed hours that an aircraft is not mission capable due to maintenance (NMCM), plus not mission capable for both maintenance and supply (NMCB).
NMCM HOURS + NMCB HOURS
X 100
POSSESSED HOURS
A3.1.3. TOTAL NOT MISSION CAPABLE SUPPLY (TNMCS) RATE: The percent of possessed hours that an aircraft is not mission capable due to supply (NMCS), plus not mission capable for both maintenance and supply (NMCB).
NMCS HOURS + NMCB HOURS
X 100
POSSESSED HOURS
A3.1.4. CANNIBALIZATION RATE: This rate represents the average number of cannibalization per 100 sorties. It includes aircraft-to-aircraft or engine-to-aircraft cannibalization actions that are codes 4 and 8 only. Code 4 is used to preclude a MICAP occurrence while code 8 is used to satisfy MICAP requirement.
(# OF ACFT-TO-ACFT CANNS) + (# OF ENGINE-TO-ACFT CANNS)
X 100
TOTAL SORTIES FLOWN

A3.1.5. CODE 3 BREAK RATE: This is the percentage of sorties that land with status code 3. It includes code-3 breaks incurred by cross-country missions and deployed aircraft, but not off station aircraft. Note: Deployed means that maintenance personnel are deployed with the aircraft, and thus responsible for providing maintenance support to their own aircraft. In contrast, off station aircraft are supported by any wing other than the owning organization. For that reason, code 3 breaks incurred by off station aircraft are not chargeable deviations.

# OF SORTIES WITH CODE 3 LANDING STATUS (BREAKS)
X 100
TOTAL SORTIES FLOWN
A3.1.6. 8-HOUR FIX RATE: The percentage of code 3 breaks fixed within 8 hours of landing. Th interval is used for fighter aircraft only.
# OF CODE 3 BREAKS FIXED WITHIN 8-HOURS AFTER LANDING X 100
TOTAL CODE 3 BREAKS
A3.1.7. 12-HR FIX RATE: The percentage of code 3 breaks fixed within 12 hours of landing. Th interval includes all aircraft other than fighter aircraft.
# OF CODE 3 BREAKS FIXED WITHIN 12-HOURS AFTER LANDING X 100
TOTAL CODE 3 BREAKS
A3.1.8. TOTAL ABORT RATE: The sum of air aborts plus ground aborts divided by total sortic flown plus ground aborts X 100. (Sorties Attempted = Sorties Flown + Ground Aborts).
AIR ABORTS + GROUND ABORTS
X 100
TOTAL SORTIES ATTEMPTED
A3.1.9. AIR ABORT RATE: The percentage of sorties flown that encountered air abort write-ups.

**AIR ABORTS** 

X 100
TOTAL SORTIES FLOWN
A3.1.10. GROUND ABORT RATE: The number of ground aborts divided by sorties attempted.
GROUND ABORTS
X 100
TOTAL SORTIES ATTEMPTED
A3.1.11. AVERAGE NUMBER OF AIRCRAFT POSSESSED: Is the average number of aircraft possessed for a particular time period.
TOTAL POSSESSED HOURS (MONTH TO DATE)
24 X # OF DAYS (MONTH TO DATE)
A3.1.12. SORTIE UTE RATE: The average number of sorties flown per primary authorized aircraft (PAA). This applies to fighter aircraft only.
SORTIES FLOWN
PRIMARY AUTHORIZED AIRCRAFT (PAA)
A3.1.13. HOURLY UTE RATE: The average hours flown per primary authorized aircraft (PAA) This includes all aircraft other than fighter aircraft.
HOURS FLOWN
PRIMARY AUTHORIZED AIRCRAFT (PAA)
A3.1.14. FLYING SCHEDULING EFFECTIVENESS RATE: The percent of sorties flown as

ADJUSTED SORTIES SCHEDULED MINUS CHARGEABLE DEVIATIONS

scheduled.

\_\_\_\_\_ X 100

#### ADJUSTED SORTIES SCHEDULED

- A3.1.15. Total Sorties Scheduled = Home base scheduled + Deployed scheduled + Off base flown
- A3.1.16. Adjusted Sorties Scheduled = Total sorties scheduled + Non chargeable adds Non chargeable deletes.
- A3.1.17. Chargeable Deviations = Chargeable (Early/Late Takeoffs) + (Deletes and Adds) + (Ground Aborts). Note: This formula includes chargeable deviations against maintenance, operations, and supply.
- A3.1.18. Dedicated Crew Chief (DCC) Rate. Dedicated Crew Chief rate is a weighted average that expresses the average rank of the assigned crew chiefs. Values are assigned for each rank which produce a weighted average. A weighted value of five equates to a SSgt.

(# OF MSGT C/C X 7) + (# OF TSGT C/C X 6) + (# OF SSGT C/C X 5) (# OF SGT C/C X 4) + (# OF SRA C/C X 3) + (# OF AMN C/C X 2) + (# OF AMN C/C X 1)

### TOTAL NUMBER OF DEDICATED CREW CHIEFS

- A3.1.19. Average Deferred Discrepancies Rate. Each Monday morning, analysts will take a "snap shot" for each reportable MDS, of the total number of deferred discrepancies for both maintenance and supply (AWM & AWP). The time frame will be for the previous work week (Monday Friday). The following formula will then be applied:
  - (1) Awaiting Maintenance Deferred Discrepancies

TOTAL AWM (SNAPSHOT) DISCREPANCIES

AVERAGE AIRCRAFT POSSESSED

(2) Awaiting Parts Deferred Discrepancies

TOTAL AWP (SNAPSHOT) DISCREPANCIES

AVERAGE AIRCRAFT POSSESSED

A3.1.20. Awaiting Maintenance (AWM). Average deferred discrepancies awaiting scheduling action (Down day, Phase, etc.) excluding depot maintenance items. Include all uncleared discrepancies on AFTO Form 781k, Maintenance Discrepancy and Work Document. The average is derived by the sum of no less than four weekly samples during the month. Use CAMS screen 774 to retrieve AWM data. The following formula will use the weekly rates to form a cumulative monthly rate.

Monthly AWM Rate:

AWM RATE(WEEK1) + AWM RATE(WEEK2) + AWM RATE(WEEK3) + AWM

RATE(WEEK4)

NUMBER OF SAMPLES

A3.1.21. Awaiting Parts (AWP). Average deferred discrepancies which require parts and have a

valid supply requisition number. The average is derived by the sum of no less than four weekly samples during the month. Use CAMS screen 774 to retrieve AWM data. The following data will use the

weekly rates to form a cumulative monthly rate.

Monthly AWP Rate:

AWP RATE(WEEK1) + AWP RATE(WEEK2) + AWP RATE(WEEK3) + AWP RATE(WEEK4)

NUMBER OF SAMPLES

A3.1.22. Monthly Average Deferred Discrepancy Rate. This average represents the sum of the monthly AWM and AWP rates.

A3.1.23. Recur Rate. This rate indicates the percentage of pilot reported discrepancies (PRD) that were recurs. A recurring discrepancy on an aircraft occurs on the second through fourth sortie or attempted sortie after corrective action has been taken and the system or subsystem is used and indicates the same malfunction.

TOTAL RECURS
\_\_\_\_\_ X 100
TOTAL PRD

A3.1.24. Repeat Rate. This is a percentage of PRDs that were repeats. A repeat write-up is one which occurs on the next sortie or attempted sortie after corrective action has been taken and the system or subsystem is used and indicates the same malfunction.

TOTAL REPEATS			
	X 100		
TOTAL PRD			

A3.1.25. Repeat/Recur Rate. The sum of repeat plus recur write-ups divided by total PRD X 100.

TOTAL REPEATS + TOTA	L RECURS
	X 100
TOTAL PRD	

Other Common Terms:

CODE 3 BREAKS: Represent aircraft code 3 landing status.

FIX RATE: This is the percent of all code 3 aircraft (landing status code 3) that are returned to flyable status within a certain time period (i.e., 8, or 12 hours), excluding ground found write-ups. For multiple code 3 write-ups, fix rate is based on the most grounding system. As an example, an aircraft landed with multiple code 3 grounding write-ups against the aircraft engine and landing gear systems with the engine having the most serious problem. Since only one code 3 break could be accounted for per sortie, it is then charged against the aircraft engine. Consequently, the fix rate is based on the aircraft engine only. Therefore, when the engine write-up is fixed the aircraft status should be changed from NMC to FMC condition for at least one minute. After such time, the aircraft status is again returned to NMC condition for the landing gear problem. It is essential that the aircraft status be changed to reflect the actual NMC downtimes for each malfunction.

HANGAR QUEEN: Is any aircraft that has not flown for 50 or more consecutive days, excluding days in B and D possession codes, days spent in alert status, and for helicopter aircraft, days in periodic inspection.

PRIMARY AUTHORIZED AIRCRAFT (PAA). Aircraft authorized to a unit to perform their operational mission. The primary authorization forms the basis for allocation of operating resources to include manpower, support equipment, and flying hour funds.

### TRITION AND SPARE FACTOR EXAMPLES

**A4.1.** General. The factors used to compute attrition will be limited to, weather, air traffic, sympathy, OT other, and HHQ deletes. NOTE: OT other for this computation must not include those sorties deleted due to completion of the monthly flying program. When developing these factors, units are to use normal statistical applications. Attrition factors are used to compensate for non-unit controlled factors. Spares are used to compensate for unit controlled factors. Attrition and spare factors will be computed for and applied to each flying squadron. Use as much historical data as required to ensure seasonal variations are considered to determine a basis for attrition and spare factors. Recommend five years or a minimum of two years of historical data. Attrition will be computed monthly and a copy of the result will be provided to Plans and Scheduling.

#### A4.2. Attrition Factor.

A4.2.1. Computation. Based on historical data from previous similar flying months. When computing attrition use the total sorties lost in a particular category. Do not use the difference between the sorties lost and those sorties added to make up for the losses. The attrition will be computed by month for the entire fiscal year.

Attrition computation example:

Deletes:

OT Other.04

Air Traffic.01

Sympathy.01

HHQ.01

Deletes attrition factor.07

Weather:.03

Overall attrition factor.10 or 10%

A4.2.2. Application (A sample of 1,000 sorties required):

Sorties Required1,000

Subtract Attrition Factor from 1 (1 - .10).90

Divide 1000 by .90

Equals Required Sorties to Schedule 1,111

## A4.3. Prorated Weather Attrition Factor

A4.3.1. Computation: Using the weather attrition factor, compute the number of anticipated sortie losses for weather. Divide the number of weather losses by the O&M days. This will determine the prorated weather attrition.

A4.3.2. Application (A sample of 1,000 sorties required):

Sorties Required1,000

Subtract the weather Attrition Factor from 1 (1 - .03).97

Divide 1,000 by .97

Equals Required Sorties to Schedule 1,031

Minus Sorties Required1,000

eather Losses Expected 31

Divide 31 by O&M Days (Use 20 for this example)

Equals Sortie Losses Expected Per O&M Day 1.55

Based on this computation, a unit would expect 1.55 sorties lost per O&M day in the month. Whenever weather losses exceed the cumulative projected weather losses (number of O&M days to date x 1.55), a unit may add (nonchargeable) sorties not to exceed the difference between the actual sorties lost due to weather and the cumulative projected weather losses.

# A4.4. Spare Factor.

A4.4.1. Computation. Based on historical data of previous similar flying months. Spare aircraft requirements will be calculated for first sorties only and may be adjusted for unusual configurations such as dart tow, flare pods, and so forth. Example is shown below.

1st Sortie Maintenance Deletions.10

1st Sortie Supply Deletions.03

1st Sortie Chargeable Ground Aborts.05

Spare Factor.18 or 18%

A4.4.2. Application (A sample figure of 12 first sorties is used in the following computation):

Spare Aircraft Required = (1st Sorties Scheduled X Spare Factor)

 $= 12 \times .18$ 

= 2.16 or 3 (rounded to the next whole number)

Spare Aircraft Required = 3

### STANDARDS AND REVIEW PROCESS

- **A5.1. Purpose.** To develop standards for the Combat Air Forces (CAF) and Pacific Air Forces aircraft. CAF members are Pacific Air Forces, Air Combat Command (ACC), US Air Forces Europe (USAFE), and CAF gained Air National Guard (ANG) and Air Force Reserves (AFRES). Standards are used to keep leadership advised of overall force readiness, to identify and isolate break-downs in required outside resources, and to identify units that need further examination.
- **A5.2. CAF Standards.** Common indicators are used to measure the health of units operation. Standards are developed for common owned aircraft. Common aircraft are defined as aircraft owned by two or more members of the CAF. Indicators for which standards are developed are: MC Rate, TNMCM RATE, TNMCS Rate, 8 HR Fix Rate, 12 HR Fix Rate, Total Abort Rate, and Flying Scheduling Effectiveness Rate. Gained forces have common standards and tracking of MC, TNMCM, and TNMCS only. NOTE: 12 HR Fix Rate only applies to B-1, B-52, KC-10, KC-135, UH-1N, E-3B/C, E-4, EC-130, EC-135, RC-135, U-2, H-60, and C-130 aircraft.
- **A5.3. Standards Review and Development Process.** The review process takes place twice each year prior to each CAF Commanders Conference where the results of each review process are presented. These reviews usually occur during the July/August (major review) and February/March (minor review) time frames. At the major reviews, members of the CAF assemble for 1 week to perform the standards review. The minor reviews are conducted by each CAF member individually and changes are discussed electronically. Each review involves the following basic steps:
  - A5.3.1. MAJCOM analysts prepare historical data for use in the review.
  - A5.3.2. MAJCOM analysts and functional managers (from maintenance and supply) review the historical data and compare them against established standards. Items discussed include historical and current averages, wing and fleet trends, frequency wings meet current standards, and expected changes in support and environment.
  - A5.3.3. Standards serve as a threshold for further analysis. They should be "challenging," and "tough, but attainable." If they're set too low, unit readiness decays too much and if too tight, analysis tends to "chase ghosts" and if out of reach they become irrelevant and demoralizing.
  - A5.3.4. Each MAJCOM presents their recommendation to the other CAF members. After negotiations are completed, the recommendations of the CAF standard working group are presented to the CAF Commanders.
  - A5.3.5. The same process is used in the development of PACAF standards but only HQ PACAF analysts and functional managers are involved. However, units are polled for their inputs. Interim standards are established when there is an insufficient amount of historical data available. This usually occurs with new weapon systems, units still in buildup, or draw down, or when there is a significant change in mission or support. Standards are reviewed and approved by PACAF/CC. They are published prior to the beginning of each fiscal year.

### **ELECTRONIC MAIL (E-MAIL) INSTRUCTIONS**

- **A6.1. Purpose.** Electronic mail will be the primary means of transmitting all reports required by PAC-AFI 21-102. Where this capability is not available, send required reports via message or FAX to DSN: 448-7842 or 448-0741. Due to the many variables involved in the E-Mail processes, i.e. types of computer hardware, software, etc., this chapter will provide only general guidance on Electronic Mail requirements, resources, procedures, etc. Details on instructions, requirements and other aspects of utilizing E-Mail may be obtained from HQ PACAF/LGM (LGM Local Area Network Representative), DSN: 449-8877.
- **A6.2. General Requirements for Electronic Mail.** Basic requirements are broken down into two categories: Hardware (Computer workstation, Modem, Telephone Lines, etc.) and Software for communication process (Procom, Enable, Microsoft Windows, etc.). The minimum hardware requirements are: 286 or better PC, 2400 baud modem, and a telephone capable of dialing 1-800 off base number (a dedicated line with no other extensions is best). Software should be any type of standard communications package which can be utilized to initiate dialing through a modem and connection to a host (software package should provide VT100 terminal emulation). Recommend you contact your local communication squadron for specific E-mail requirements for your base.
- **A6.3. Standard Guidelines for Accessing the LG LAN.** The preferred method for transmitting data is via connection to a local base Terminal Access Controller (TAC) or via connection to a TAC utilizing a 1-800 number to a Defense Data Network (DDN) Node. Information concerning a base particular connection method may be obtained from the LAN office.
- **A6.4. Types of Information Which may be Sent via E-Mail.** Only **UNCLASSIFIED** information/data may be transmitted via E-Mail. Neither the HQ PACAF LAN system nor the DDN connections are cleared to handle the transmission of classified data. The electronic mail system outlined herein may be utilized to send DOD **OFFICIAL BUSINESS** in the form of text messages, reports, computer files (text/data), briefings, etc., to other using agencies on the DDN and HQ PACAF LAN.